

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for managing schemas, comprising:
registering a schema and one or more associated schema documents;
automatically generating a schema information document based on the schema and the one or more associated schema documents, wherein the schema information document formalizes and records meta-information of the schema, wherein the meta-information of the schema includes identification of a primary schema document, identification of other associated schema documents, and how the primary and the other schema documents are related to each other; and
processing a request to be performed on at least one of the schema [[,]] and an associated schema document [[, and]] using the schema information document.
2. (Currently Amended) The method of claim 1, further comprising:
storing an identifier for the schema, wherein the identifier includes a three-part composite key and ~~an optional~~ a unique name, wherein the three-part composite key includes a target namespace and a schema location; and
storing identifiers for each of the one or more associated schema documents, wherein each identifier includes a three-part composite key.
3. (Currently Amended) The method of claim 2, wherein at least one part of the three-part composite key includes a version identifier that is independent of a primary schema document, wherein versioning of the schema is capable of being independent of versioning of the associated schema documents.
4. (Currently Amended) The method of claim 1, wherein the schema and the one or more schema documents are stored and further comprising:

when a copy of the schema document has already been stored, discarding the schema document, wherein it is determined that the copy of the schema document has already been stored by determining that the schema document to be stored and a schema document that has already been stored have a same target namespace, a same schema location, and same content; and

when ~~a portion of the three-part composite key of~~ the schema document to be stored ~~matches a three-part composite key of and~~ a schema document that has already been stored have a same target namespace, a same schema location, and different content, storing the schema document with a version identifier.

5. (Currently Amended) The method of claim 1, wherein the request comprises deregistering the schema according to deregister rules associated with the schema when the schema is registered.

6. (Currently Amended) The method of claim 1, wherein the request comprises lookup of a schema and further comprising:

when there is one matching schema, returning the matching schema;

when there are multiple matching schemas, applying a filter to identify one matching schema; and

when there is no matching schema, applying at least one of a user-defined technique and a system defined technique to find a matching schema,

wherein information in the schema information document is used to locate associated schema documents when the schema has been identified.

7. (Original) The method of claim 1, wherein the request comprises replacement of at least one of the schema and one of the schema documents and further comprising:

replacing the schema if a new schema is backward compatible; and

replacing one of the schema documents if a new schema document is backward compatible.

8. (Original) The method of claim 1, wherein the request comprises access of at least one of the schema and one of the schema documents and wherein access is granted based on an access privilege associated with a user and the schema.

9. (Currently Amended) An article of manufacture embodied as one of a computer readable storage medium and hardware logic including program logic for managing schemas, wherein the program logic causes operations to be performed, the operations comprising:
registering a schema and one or more associated schema documents;
automatically generating a schema information document based on the schema and the one or more associated schema documents, wherein the schema information document formalizes and records meta-information of the schema, wherein the meta-information of the schema includes identification of a primary schema document, identification of other associated schema documents, and how the primary and the other schema documents are related to each other; and
processing a request to be performed on at least one of the schema [[,]] and an associated schema document [[, and]] using the schema information document.

10. (Currently Amended) The article of manufacture of claim 9, wherein the operations further comprise:
storing an identifier for the schema, wherein the identifier includes a three-part composite key and ~~an optional~~ a unique name, wherein the three-part composite key includes a target namespace and a schema location; and
storing identifiers for each of the one or more associated schema documents, wherein each identifier includes a three-part composite key.

11. (Currently Amended) The article of manufacture of claim 10, wherein at least one part of the three-part composite key includes a version identifier that is independent of a primary schema document, wherein versioning of the schema is capable of being independent of versioning of the associated schema documents.

12. (Currently Amended) The article of manufacture of claim 9, wherein the schema and the one or more schema documents are stored and wherein the operations further comprise:

when a copy of the schema document has already been stored, discarding the schema document, wherein it is determined that the copy of the schema document has already been stored by determining that the schema document to be stored and a schema document that has already been stored have a same target namespace, a same schema location, and same content; and

when ~~a portion of the three-part composite key of~~ the schema document to be stored ~~matches a three-part composite key of and~~ a schema document that has already been stored have a same target namespace, a same schema location, and different content, storing the schema document with a version identifier.

13. (Currently Amended) The article of manufacture of claim 9, wherein the request comprises deregistering the schema according to deregister rules associated with the schema when the schema is registered.

14. (Currently Amended) The article of manufacture of claim 9, wherein the request comprises lookup of a schema and wherein the operations further comprise:

when there is one matching schema, returning the matching schema;

when there are multiple matching schemas, applying a filter to identify one matching schema; and

when there is no matching schema, applying at least one of a user-defined technique and a system defined technique to find a matching schema,

wherein information in the schema information document is used to locate associated schema documents when the schema has been identified.

15. (Original) The article of manufacture of claim 9, wherein the request comprises replacement of at least one of the schema and one of the schema documents and wherein the operations further comprise:

replacing the schema if a new schema is backward compatible; and

replacing one of the schema documents if a new schema document is backward compatible.

16. (Original) The article of manufacture of claim 9, wherein the request comprises access of at least one of the schema and one of the schema documents and wherein access is granted based on an access privilege associated with a user and the schema.

17. (Currently Amended) A system for managing schemas, comprising:
means for registering a schema and one or more associated schema documents;
means for automatically generating a schema information document based on the schema and the one or more associated schema documents, wherein the schema information document formalizes and records meta-information of the schema, wherein the meta-information of the schema includes identification of a primary schema document, identification of other associated schema documents, and how the primary and the other schema documents are related to each other; and

means for processing a request to be performed on at least one of the schema [[,]] and an associated schema document [[, and]] using the schema information document.

18. (Currently Amended) The system of claim 17, wherein the schema and the one or more schema documents are stored and further comprising:

means for, when a copy of the schema document has already been stored, discarding the schema document, wherein it is determined that the copy of the schema document has already been stored by determining that the schema document to be stored and a schema document that has already been stored have a same target namespace, a same schema location, and same content; and

means for, when ~~a portion of the three-part composite key of~~ the schema document to be stored ~~matches a three-part composite key of~~ and a schema document that has already been stored have a same target namespace, a same schema location, and different content, storing the schema document with a version identifier.

19. (Currently Amended) The system of claim 17, wherein the request comprises one of deregistering the schema according to deregister rules associated with the schema when the schema is registered, lookup of a schema, and replacement of at least one of the schema and one of the schema documents.

20. (Original) The system of claim 17, wherein the request comprises access of at least one of the schema and one of the schema documents and wherein access is granted based on an access privilege associated with a user and the schema.